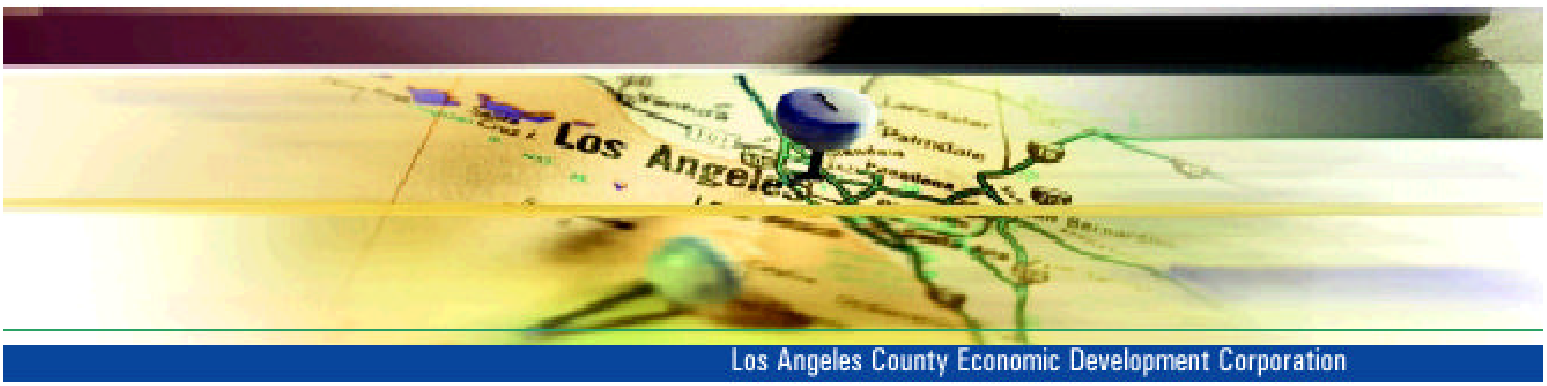
WHAT IS THE COST OF RUN-AWAY PRODUCTION?
JOBS, WAGES, ECONOMIC OUTPUT AND STATE TAX REVENUE AT RISK WHEN MOTION PICTURE PRODUCTIONS LEAVE CALIFORNIA



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INTRODUCTION

California's economy has benefited greatly from the presence of the motion picture industry[1] in the state, particularly in Los Angeles County. Yet, a growing number of states and countries have recognized the value of employment and government tax revenues generated by film and television production and are aggressively courting the business with tax credits and other enticements. This is a highly mobile industry, and while California may scarcely notice the impact of losing a single production, over time the state may find itself chasing an industry that has quietly left.

California continues to enjoy a strong competitive advantage in motion picture production because of its unparalleled production infrastructure. The state has the most plentiful and well-trained crew base in the world, as well as cutting-edge production and post-production facilities.

In recent years, however, other states and countries have started building their own studio facilities, launched training programs for their residents, and implemented relocation and outreach programs for experienced non-residents. The result has been to create real competition for motion picture production. With production companies able to choose from a range of possible locations, California is at risk of losing the economic benefits of motion picture production.

In this study, the Los Angeles County Economic Development Corporation (LAEDC) quantifies the economic output (business revenues), jobs, wages, and state taxes at risk in California because of runaway production.

The study is conducted in four parts.

The first section provides background and context. We present an overview of the motion picture industry, using a variety of government and industry data to describe industry expenditures, jobs, and payrolls. We also briefly describe the major strengths, weaknesses, opportunities, threats and outlook for the industry.

In section two, we calculate the total jobs, wages, economic output, and state tax revenues generated by each of seven types of production: a commercial; a television movie-of-the-week; a one-hour television drama; plus four feature films: one small, two mid-size and one large-budget.

Section three looks at production company location decisions; presents data on the share of productions locating in California (in whole or in part); and describes motion picture industry incentives offered by other states and other countries.

Section four focuses on the challenge posed by runaway production. We summarize the economic activity and state tax revenues at risk every time a production leaves California.

[1] Motion picture production includes feature films, television programs, and commercials.

BACKGROUND

Employment: To the general public, the motion picture industry consists of the major studios and the highly paid stars. Yet the bulk of the movie production workforce is "below the line." These are the tens of thousands of people who work on production crews on everything from wardrobe, catering, transportation, set design and construction, props, security, hair and makeup, editing, etc.

The Motion Picture Association of America, Inc.[2] (MPAA) estimates that motion picture production spending on payroll and purchases from vendors in 2002 was $56.6 billion nationally and $34.3 billion in California. This spending makes the industry a major employer, particularly in California, as shown in the table below.

Motion Picture Production Employment, 2002

	Employment	Payrolls
U.S.		
U.S. Census*	153,000	$9.3 billion
MPAA	353,076	$21.2 billion
California		
U.S. Census*	88,500	$6.4 billion
MPAA	245,900	$17.2 billion

*NAICS codes: 51211, 51212, 51219, 51224, 51229
Sources: U.S. Dept. of Commerce, Bureau of the Census; MPAA

The U.S. Census reports that motion picture production employed 153,000 people with earnings of $9.3 billion in 2002. More than half of the people (and two-thirds of the earnings) were in California. The U.S. Census is widely regarded by economists as an authoritative source of industry information; however, it only counts people who are “paid employees for the pay period including March 12.” The Census methodology therefore does not include temporary and freelance workers who were employed at other times of the year but not during the March pay period, nor does in fully capture independent contractors. This leads to a significant undercount of employment in motion picture production, an industry characterized by the widespread use of independent contractors and temporary help.

The MPAA conducts its own survey of employment in the industry, covering the six major studios plus independent production companies. By working with payroll firms directly, the MPAA is able to produce a more comprehensive estimate of industry employment that includes the freelancers and temporary workers. The MPAA estimates industry employment of 353,076 people nationwide in 2002, with 245,900 people employed in California. Film production workers collectively earned $21.2 billion nationwide, $17.2 billion of it in California.

[2] MPAA member companies include: The Walt Disney Company; Metro-Goldwyn-Mayer Studios, Inc.; Paramount Pictures Corporation; Sony Pictures Entertainment, Inc.; Twentieth Century Fox Film Corporation; Universal City Studios, LLP; and Warner Bros. Entertainment, Inc.

By any measure, the bulk of California's motion picture employment is in Los Angeles County (87.5% according to County Business Patterns). Outside of L.A., the counties with the most industry employment include: Alameda, Contra Costa, Marin, Orange, Riverside, San Bernardino, San Diego, San Francisco, Santa Clara and Ventura. [Note that the MPAA's more inclusive methodology and Census Bureau disclosure rules (which protect confidential firm data) lead each to produce different relative rankings among these counties.]

California Motion Picture Production Industry Assessment

Motion picture production is a "signature" industry for California, especially the Los Angeles area. Here we briefly survey the strengths, weaknesses, opportunities, threats and outlook for the industry.

Current Strengths:

- Los Angeles has a relatively strong industry position: L.A. County has 30 percent of U.S. employment in the motion picture and sound recording industry (New York City has 10 percent).
- California has a large existing industry base and substantial infrastructure concentrated in Los Angeles, including major studios and independent production companies, stage rental facilities, as well as post-production facilities (such as visual effects houses and recording and scoring facilities) and support services (such as equipment rental firms).
- The largest concentration of motion picture production talent (behind and in front of the camera) can be found in California.
- There are a number of excellent training/education institutions with highly regarded industry-specific programs in the state.

Current Weaknesses:

- California is a high cost state for all businesses, (taxes, workers' compensation, utility costs, etc.) and the film industry is not an exception in this regard.
- There is always the possibility of labor unrest or strikes in any unionized industry, and each motion picture collective bargaining agreement has to be renegotiated with each union every three years.
- There is some local community hostility to filming activity (notably in certain parts of Los Angeles that frequently serve as the backdrop for films, and television shows, and commercials). This has led to occasional production restrictions.

Opportunities:

- Demand for content is growing due to the wide range of media – TV, cable channels, satellite, DVD, video-on-demand and internet – all looking for original programming. [There is also advertising produced for each of these outlets.]
- There is growing interaction, collaboration, and cross-over of talent between the motion picture industry, visual effects companies, video gaming and even creators of military training programs. Video game producers, for example, have opened design facilities in L.A. to take advantage of these synergies.

Threats:

- The biggest threat facing the industry as a whole is piracy. The threat of theft is two-fold, with the industry losing revenues to sales of pirated copies of DVDs (particularly in foreign countries) and to illegal file-sharing over the Internet. [Note: The loss of sales hurts the companies and their shareholders as well as the workers whose pension and health plans are funded in part by revenues from post-theatrical distribution.] The movie industry and various levels of government are attempting to address the problem, but the battle will be long and success is not guaranteed. The MPAA estimates the sale of bootleg DVDs costs the industry $3.5 billion annually in lost sales worldwide.
- The biggest threat to motion picture employment and payrolls in California is runaway production. Film and television production is a target industry for other cities, states, and countries, many of which offer subsidies. This only increases the cost advantage of other areas compared to high-cost California.

Outlook:

- Strong demand for new content will increase as non-traditional markets continue to grow.
- The low (and falling) foreign exchange value of the U.S. dollar will help California in competition with overseas and Canadian locations for productions. California will have to compete with other U.S. states for this business, however, and our high cost of doing business and lack of incentives could put us at a disadvantage.
- Labor peace looks likely to continue for the moment, at least, with all the major unions having just negotiated three-year contracts.

MOTION PICTURE PRODUCTION: JOBS, WAGES, OUTPUT & TAXES

Motion picture production is a major economic engine in California, particularly in Los Angeles. In this section, we look at representative budgets covering a range of production types: a commercial; a television movie-of-the-week; a one-hour television drama; plus four feature films: one small, two mid-size and one large budget.

Methods: The LAEDC measured job creation and economic output using an in-house model based on the Regional Input-Output Modeling System (RIMS II), which was developed by the U.S. Department of Commerce, Bureau of Economic Analysis. We started by combing through a detailed budget for each type of production. [We used actual budgets from recent California-based productions obtained for us by the California Film Commission.] We estimated the number of days of employment created, adding up the wages and benefits paid, and noted any taxable spending. Then we converted the job creation to annual equivalents and used multipliers to estimate the total value of economic output, wages and the number of jobs created by each production type. Finally, we estimated the sales taxes and state income taxes paid by the direct and indirect workers and added these to the sales taxes paid directly by each production.

Approach: At the LAEDC, *our estimates typically represent the lower bound of possible economic impact*. Our results are understated because of data limitations and constraints inherent in economic impact analysis work. We must rely on estimates for many of our inputs, introducing a level of uncertainty in our results. To compensate, when faced with a choice among plausible estimates, we prefer to adopt the one(s) that will produce the *lowest* impact in terms of jobs, wages, and taxes. Occasionally, we will omit economic activity we *know* exists, if we are not able to document a satisfactorily narrow (and hence credible) range of plausible estimates. Throughout, our goal has been to solidly establish a baseline of economic activity. Accordingly, the results for each representative production detailed below should be read with an implied “not less than” or “at least” preceding all employment and tax impact estimates.

Key Definitions: ***Direct workers*** are the people who work directly on the production in some capacity: in pre-production, shooting, or post-production. Direct workers thus include everyone “above-the-line” (directors, actors, writers, and producers) as well as everyone “below-the-line” (such as grips, makeup artists, camera operators, security, catering, and transportation personnel). The ***indirect workers*** are the people who owe their jobs to the purchases made by the firms and people working on the each production. This includes, for example, the employees of firms that supply vehicles (both for use in a shoot and for daily transportation), equipment rentals and building supplies, as well the employees at the many shops, restaurants and other businesses where the direct workers spend their wages.

For each production, we have reported the combined ***total earnings*** of the direct and indirect workers. The total earnings are more – often much more – than the budget total. This seeming contradiction is due to there being more indirect than direct workers. The production company only pays the wages of the direct workers. We have also reported the ***economic output*** or total business revenues generated by each production. Economic output is the increase in gross receipts realized by all firms as a result of direct and indirect economic activity associated with the initial production spending.

The total job creation (direct and indirect workers) is reported in ***annual full-time-equivalents*** (FTEs), or one year's worth of full-time work. This method of measuring job creation is particularly useful for a film or television production, where the jobs created are not permanent. (They last, at most, until the end of post-production, with many jobs lasting just during the actual shooting.) The only drawback to using annual full-time-equivalents is that it can obscure the sheer number of people working on each project. For film and television productions, we wish to emphasize that each FTE job represents more—often many more—than one person. For example, 125 extras working for two days each and two camera operators each working for six months both count as one FTE.

Motion picture productions generate ***tax revenues*** for the state. State sales tax revenue is generated in two ways. First, the production itself pays sales and use taxes on everything from the purchase of materials for set construction to the rental of equipment such as vehicles. [Most productions have large transportation budgets.] Second, the direct and indirect workers supported by the production pay sales taxes when they spend their wages. The state collects a tax of 6.25 percent on taxable transactions statewide. [The remainder of the sales tax, which varies by county, is split among the city, county, and transportation authority where the tax was collected.] The productions also generate state incomes taxes, paid by the direct and indirect workers.

For each of the productions we report the sum of the sales and income taxes generated for the state. *The total taxes generated for the state, however, will certainly be much higher.* Employed workers will pay state unemployment insurance and California disability insurance. The production and direct and indirect workers will pay state fuel taxes for vehicles used for filming and personal transportation. Profits earned by the numerous firms (from caterers and security firms to equipment rental firms and ad agencies) involved in making the commercial will be subject to state corporate taxes. The loss of these additional state taxes has not been included in our estimates of the states taxes at risk when productions leave California.

COMMERCIAL

The LAEDC examined a detailed representative budget for a television commercial with a total cost of $561,000. The production had two 12-hour production days on location in Los Angeles. The total economic impact of making the commercial (from pre- through post-production) in California is summarized in the table below.

Making a Commercial in California:
Jobs, Wages, and Economic Output

Employment*	7
Direct	2
Indirect	5
Earnings	$580,000
Economic Output	$1,600,000

*Full-time, annual equivalents. The actual number of people involved (most working a few days or weeks) was much greater. Total may not sum due to rounding.
Source: LAEDC

Shooting a typical commercial takes just two days, yet the entire process creates temporary employment for 96 people. This is equivalent to creating just over 2 full-time, year long jobs. The combination of intense spending—the bulk of which goes to labor and equipment (as opposed to real estate or capital investments)—and high wages creates a high multiplier effect for spending in the motion picture and television industry. Making a single commercial sustains the equivalent of slightly more than 5 full-time indirect jobs, bringing total employment supported by the production to 7 full-time jobs. These workers earn $580,000 in wages. Total compensation is higher still, since the industry workers typically receive generous benefit packages. The overall economic output generated by the production is $1.6 million. The associated California state taxes are described in the table below.

Making a Commercial in California:
State Tax Revenues

Sales Tax*	$14,000
State Income Tax	$34,000
Total**	$48,000

*State share (6.25%) **only**; excludes local—city, county, and transportation—share.
Source: LAEDC
**May not sum due to rounding.

Making a commercial can be expected to generate $14,000 in sales tax revenue for the state. The production will also generate state income taxes of about $34,000 on the wages of the direct and indirect workers. Thus, a typical commercial will generate *at least* $48,000 in state taxes if it is made in California.

MOVIE-OF-THE-WEEK

The LAEDC examined a detailed representative budget for a 2-hour television movie-of-the-week shot in Los Angeles. The production had a total budget of $4.4 million, split more or less evenly between above-the-line and below-the-line costs. Shooting took place on nineteen 12-hour days. The budget was a little unusual in that production for most movies-of-the-week has already run away to lower cost locales, particularly Canada. The total economic impact of making the movie-of-the-week (from pre- through post-production) in California is summarized in the table below.

Making a Movie-of-the-Week in California:
Jobs, Wages, and Economic Output

Employment*	102
Direct	25
Indirect	77
Earnings	$8,900,000
Economic Output	$12,600,000

*Full-time, annual equivalents. The actual number of people involved (most working a few days or weeks) was much greater. Total may not sum due to rounding.
Source: LAEDC

A television movie-of-the-week creates temporary jobs for 175 cast and crew, plus 166 extras. The work created is equivalent to 25 full-time, one-year jobs. The TV movie-of-the-week also sustains the equivalent of 77 full-time indirect jobs, bringing total employment supported by the production to 102 full-time jobs. These workers earn $8.9 million in wages. Total compensation is higher still, since the industry workers typically receive generous benefit packages. The overall economic output generated by the production is $12.6 million. The associated California state taxes are described in the table below.

Making a Movie-of-the-Week in California:
State Tax Revenues

Sales Tax*	$170,000
State Income Tax	$460,000
Total**	$640,000

*State share (6.25%) **only**; excludes local—city, county, and transportation—share.
**May not sum due to rounding.
Source: LAEDC

A movie of-the-week can be expected to generate $170,000 in sales tax revenue for the state. The production will also generate state income taxes of about $460,000 on the wages of the direct and indirect workers. Thus, a typical movie-of-the-week will generate *at least* $640,000 in state taxes if it is made in California.

ONE-HOUR DRAMA

The LAEDC examined a single episode of a one-hour television series shot in Los Angeles. Each episode of this twelve-episode series has a total budget of $2.2 million, with $761,000 in above-the-line costs and $1.5 million in below-the-line costs. The total cost for the 12-episode season was $26.8 million. The series was produced during a 30-week span, with actual shooting for each episode taking eight days, including four 12.5-hour days in the studio, and four 13.5-hour days on location. The total economic impact of the series, for one episode and for all twelve (including everything from pre- through post-production) in California is summarized in the table below.

Making a One-Hour Television Drama in California: Jobs, Wages, and Economic Output

	Single Show	Entire Season
Employment*	60	720
Direct	15	180
Indirect	45	540
Earnings	$3,700,000	$44,200,000
Economic Output	$6,400,000	$76,500,000

*Full-time, annual equivalents. The actual number of people involved (most working a few days or weeks) was much greater. May not sum due to rounding.
Source: LAEDC

Making a single episode of a television drama creates temporary employment for 254 cast and crew, plus 150 extras. The work created by one episode is equivalent to 15 full-time, one-year jobs. A single episode also sustains the equivalent of 45 full-time indirect jobs, bringing total employment supported by the production to 60 full-time jobs. Over the course of a twelve-episode season, the series will sustain direct employment equivalent to 180 full-time jobs plus indirect employment equivalent to 540 full-time jobs, for total employment equivalent to 720 full-time jobs.

Together, the direct and indirect workers earn $3.7 million in wages per episode and $44.2 million per season. Total compensation is higher still, since the industry workers typically receive generous benefit packages. The overall economic output generated by the production is $6.4 million per episode and $76.5 million per season. The associated California state taxes are described in the table on the next page.

Making a One-Hour Television Drama in California:
State Tax Revenues

	Single Show	Entire Season
Sales Tax*	$70,000	$880,000
State Income Tax	$190,000	$2,230,000
Total**	$260,000	$3,100,000

*State share (6.25%) **only**; excludes local—city, county, and transportation—share.
**May not sum due to rounding.
Source: LAEDC

Making a television drama can be expected to generate $70,000 in sales tax revenue for the state per episode, and $880,000 over the course of a season. The production will also generate state income taxes on the wages of the direct and indirect workers of about $190,000 per episode and $2.23 million per season. Thus, a typical television drama will generate *at least* $260,000 in state taxes per episode and $3.10 million per 12-episode season if it is made in California.

FEATURE FILM - $2 MILLION BUDGET

The LAEDC examined a $2-million, low-budget feature film shot in Los Angeles. We calculated the impact of the $534,000 in above-the-line spending and $1.1 million in below-the-line spending. [We omitted the $335,000 budgeted for contingency spending, plus loan and bond fees.] The film had 16 shooting days. The total economic impact of making the film (from pre- through post-production) in California is summarized in the table below.

Making a Low-Budget Movie in California:
Jobs, Wages, and Economic Output

Employment*	59
Direct	15
Indirect	44
Earnings	$3,010,000
Economic Output	$4,790,000

*Full-time, annual equivalents. The actual number of people involved (most working a few days or weeks) was much greater. Total may not sum due to rounding.
Source: LAEDC

Making a low-budget movie creates temporary jobs for 160 cast and crew, plus 130 extras. The work created is equivalent to 15 full-time, one-year jobs. The film project also sustains the equivalent of 44 full-time indirect jobs, bringing total employment supported by the production to 59 full-time jobs. These workers earn $3.0 million in wages. Total compensation is higher still, since the industry workers typically receive generous benefit packages. The overall economic output generated by the production is $4.8 million. The associated California state taxes are described in the table below.

Making a Low-Budget Movie in California:
State Tax Revenues

Sales Tax*	$65,000
State Income Tax	$151,000
Total**	$215,000

*State share (6.25%) **only**; excludes local—city, county, and transportation—share.
**May not sum due to rounding.
Source: LAEDC

A low-budget movie can be expected to generate $65,000 in sales tax revenue for the state. The production will also generate state income taxes of about $151,000 on the wages of the direct and indirect workers. Thus, a typical low-budget movie will generate *at least* $215,000 in state taxes if it is made in California.

FEATURE FILM - $17 MILLION BUDGET

The LAEDC examined a $17-million, mid-budget feature film shot in California with a Los Angeles crew. We calculated the impact of the $4.1 million in above-the-line spending and $11.3 million in below-the-line spending. [We omitted the $1.6 million budgeted for contingency spending and bond fees.] The film had 40 shooting days at a location outside of Los Angeles County, which is reflected in the additional spending for accommodations, food, and transportation. The total economic impact of making the film (from pre- through post-production) in California is summarized in the table below.

Making a Mid-Budget Movie in California: Jobs, Wages, and Economic Output

Employment*	304
Direct	75
Indirect	228
Earnings	$25,700,000
Economic Output	$43,900,000

*Full-time, annual equivalents. The actual number of people involved (most working a few days or weeks) was much greater. Total may not sum due to rounding.
Source: LAEDC

Making a $17-million mid-budget movie creates temporary jobs for 170 cast and crew, plus 931 extras. The work created is equivalent to 75 full-time, one-year jobs. The film project also sustains the equivalent of 228 full-time indirect jobs, bringing total employment supported by the production to 304 full-time jobs. These workers earn $25.7 million in wages. Total compensation is higher still, since the industry workers typically receive generous benefit packages. The overall economic output generated by the production is $43.9 million. The associated California state taxes are described in the table below.

Making a Mid-Budget Movie in California: State Tax Revenues

Sales Tax*	$557,000
State Income Tax	$1,230,000
Total**	$1,784,000

*State share (6.25%) **only**; excludes local—city, county, and transportation—share.
**May not sum due to rounding.
Source: LAEDC

A $17-million mid-budget movie can be expected to generate $557,000 in sales tax revenue for the state. The production will also generate state income taxes of about $1.2 million on the wages of the direct and indirect workers. Thus, a typical mid-budget movie will generate *at least* $1.8 million in state taxes if it is made in California.

FEATURE FILM - $32 MILLION BUDGET

The LAEDC examined a second mid-budget feature film shot in Los Angeles. The movie had a total budget of $31.6 million, with $12.1 million in above-the-line costs and $19.4 million in below-the-line costs. The film had 45 shooting days. The total economic impact of making the film (from pre- through post-production) in California is summarized in the table below.

Making a Mid-Budget Movie in California: Jobs, Wages, and Economic Output

Employment*	565
Direct	141
Indirect	425
Earnings	$57,000,000
Economic Output	$90,000,000

*Full-time, annual equivalents. The actual number of people involved (most working a few days or weeks) was much greater. Total may not sum due to rounding.
Source: LAEDC

Making a $32-million, mid-budget movie creates temporary jobs for 588 cast and crew, plus 1,182 extras. The work created is equivalent to 141 full-time, one-year jobs. The film project also sustains the equivalent of 425 full-time indirect jobs, bringing total employment supported by the production to 565 full-time jobs. These workers earn $57 million in wages. Total compensation is higher still, since the industry workers typically receive generous benefit packages. The overall economic output generated by the production is $90 million. The associated California state taxes are described in the table below.

Making a Mid-Budget Movie in California: State Tax Revenues (Millions of Dollars)

Sales Tax*	$1,200,000
State Income Tax	$2,900,000
Total**	$4,100,000

*State share (6.25%) **only**; excludes local—city, county, and transportation—share.
**May not sum due to rounding.
Source: LAEDC

A mid-budget movie can be expected to generate $1.2 million in sales tax revenue for the state. The production will also generate state income taxes of about $2.9 million on the wages of the direct and indirect workers. Thus, a typical mid-budget movie will generate *at least* $4.1 million in state taxes if it is made in California.

FEATURE FILM - $70 MILLION BUDGET

The LAEDC examined a large-budget feature film shot in Los Angeles. The movie had a total budget of $69.7 million, with $37.1 million in above-the-line costs and $32.6 million in below-the-line costs. The film had 75 shooting days. The total economic impact of making the film (from pre- through post-production) in California is summarized in the table below.

Making a Large-Budget Movie in California: Jobs, Wages, and Economic Output

Employment*	928
Direct	231
Indirect	697
Earnings	$149,000,000
Economic Output	$199,000,000

*Full-time, annual equivalents. The actual number of people involved (most working a few days or weeks) was much greater. Total may not sum due to rounding.
Source: LAEDC

Making a big-budget movie creates temporary jobs for 630 cast and crew, plus 670 extras. The work created is equivalent to 231 full-time, one-year jobs. The film project also sustains the equivalent of 697 full-time indirect jobs, bringing total employment supported by the production to 928 full-time jobs. These workers earn $149 million in wages. Total compensation was higher still, since the industry workers typically receive generous benefit packages. The overall economic output generated by the production is $199 million. The associated California state taxes are described in the table below.

Making a Large-Budget Movie in California: State Tax Revenues (Millions of Dollars)

Sales Tax*	$2,800,000
State Income Tax	$7,800,000
Total**	$10,600,000

*State share (6.25%) **only**; excludes local—city, county, and transportation—share.
**May not sum due to rounding.
Source: LAEDC

A big-budget movie can be expected to generate $2.8 million in sales tax revenue for the state. The production will also generate state income taxes of about $7.8 million on the wages of the direct and indirect workers. Thus, a big-budget movie will generate *at least* $10.6 million in state taxes if it is made in California.

PRODUCTION LOCATIONS

Feature Film Locations: *The Hollywood Reporter* tracks feature film production by major U.S. studios and U.S. independent production companies. For each production, the trade paper reports the filming location (or locations, where appropriate). The table below summarizes annual film production location data from the past five years.

California's Share of Feature Film Production by Location, 2000-2004

	Movies Shot in …				
Year	California Only	Share of Total	CA + Elsewhere	Share of Total	All Productions (Total)
2000	212	31.0%	60	8.8%	683
2001	197	32.2%	45	7.4%	611
2002	174	31.9%	56	10.3%	546
2003	151	25.5%	44	7.4%	593
2004	182	29.8%	54	8.8%	611

Source: *The Hollywood Reporter*

The 182 features shot exclusively in California comprised 30 percent of 611 productions in 2004. The state's exclusive share of total film production over the past five years has ranged from a low of 26 percent in 2003 to a high of 32 percent in 2001.

A further 54 films were shot at least partially in California, accounting for 9 percent of the year's productions. [Among films shot partially in California, there is no way to differentiate, for example, films with 20 percent of their production in-state from those with 80 percent.] Thus, 236 features were shot partially or exclusively in California in 2004, representing 39 percent of productions that year. The remaining 61 percent of films were shot exclusively or in combination in other U.S. states, Canada and the rest of the world.

The LAEDC also examined detailed weekly production location data from *The Hollywood Reporter*. Two things stood out.

- First, when they leave California, the major studios tend to go off-shore rather than to other states. Forty-five percent of all major studio films were shot outside the United States in 2004. In many cases, story considerations are an important influence, but the financial benefits are usually significant as well.

- The second important trend is that independent producers are increasingly going elsewhere in the U.S. Among independent films shot in 2004, 48 percent were shot in the United Sates outside of California.

Location Decisions: Motion picture production is unique. In most industries, firms make location decisions for their operations (or an expansion of existing operations) only once. After considering issues such as the available labor pool, relative tax burden, proximity to potential customers and suppliers, overall business climate and similar factors, a firm settles on a location. The firm may revisit its decision down the road, but at that point the existing site will enjoy an advantage created by the firm's sunk costs. Moving (particularly out of the state) would probably require replacing buildings, staff, and possibly supplier and customer relationships built up over time. In the movie industry, however, each new production is essentially a fresh start.

Movie productions are *extremely* flexible in their location decisions. Each film has its own budget; has no sunk costs tying it to an existing location; has potential customers nationwide (if not worldwide); and its distribution costs are not production-location-dependent. [New television productions have almost as much flexibility. However, long-running shows with their sets already built look more like ordinary businesses in that, all else equal, changing locations for another season would be more expensive than staying put.]

Production Incentives: Motion picture production is an extremely attractive business. Even small productions may (briefly) employ hundreds of people. While actors grab the spotlight, the bulk of the job creation is below-the-line in surprisingly well-paid jobs which typically include health insurance and pension benefits. A production's spending—on everything from props to transportation to clean-up crews—creates additional jobs, generates local and state taxes, and stimulates the local economy. On-location shooting may cause some inconvenience for local residents, but many jurisdictions have decided that the good jobs from a non-polluting industry outweigh any downside. Indeed, many states, provinces, and even countries have been actively luring U.S. production companies with a range of tax breaks and other incentives.

In the U.S., Illinois, Louisiana, New Mexico, New York and Pennsylvania have been the most enthusiastic suitors, courting production companies with tax credits on investment (LA), payroll (IL, LA) and production (LA, NM, NY, PA) costs; sales and use tax exclusions and exemptions (LA, NY); and interest free loans (NM). More than 17 other states have introduced legislation that would create similar enticements.

In Canada, British Columbia, Ontario, Manitoba, Nova Scotia, Quebec and Saskatchewan offer tax credits on labor expenditures within their borders ranging from 17.5 percent to 45 percent, with additional bonus tax credits available for productions filming outside major cities and for companies with multiple projects. The Canadian government offers a 16 percent federal tax credit over and above the provincial tax credits for labor expenditures.

Elsewhere, Australia, the United Kingdom, South Africa, Puerto Rico, Hungary, Fiji, and Ireland offer tax credits while New Zealand offers grants. Australia, New Zealand, the UK, and Canada have made noises about moving towards grants as well. For more details on film production incentives see Appendix A.

The incentives can be very effective in luring productions, as the Canadian experience attests. Here in the U.S., production spending in Illinois increased from $25 million in 2003 (prior to the adoption of incentives) to $75.5 million in 2004. In a more striking example, production expenditures in Louisiana grew from $12 million in 2002 to $330 million in 2004 after the adoption of its incentives.

Other Considerations: The development of excellent post-production facilities in other countries (notably in England, Australia, New Zealand, Canada, and Germany) has already enabled a shift elsewhere of work that was once done almost exclusively in California. This trend is now continuing within the U.S. Whereas today a production may shoot in Louisiana, but return to Los Angeles for post-production work, other states are now seeing the development of new facilities. For example, there is a new sound stage complex in New York City and another looking to expand; a digital media production facility is planned for New Mexico; and there is significant activity in Louisiana converting warehouses for production use. These privately funded projects complement incentives and programs offered by states seeking to attract the productions.

Production companies used to find that the locations offering incentives frequently lacked the crew base to support production, which meant they had to bring along crew members from California. The state still lost most of the economic and fiscal benefits of in-state production, but at least California residents were being employed. [Depending on the circumstances, the state may have collected income taxes on the wages earned by residents working outside the state.] Increasingly, however, production companies are finding readily available local crews, obviating the need to employ crew members from California on out-of-state projects. Experienced personnel from previous productions [which likely were drawn by production incentives], incentives for training local residents, and restrictions limiting incentives to productions that employ local residents have all contributed to this trend.

CALIFORNIA'S LOSS: THE COST OF RUN-AWAY PRODUCTION

California has been the center of U.S. motion picture production for almost as long as the industry has existed. Yet, as advertisements for financial products always remind us: past performance does not guarantee future results. The challenge for California is how to keep as much of this lucrative yet highly mobile industry here.

California's key competitive advantage is its critical mass of talented film production workers experienced in all aspects of the business coupled with the large existing industry base and substantial infrastructure. The Golden State, however, is also a high-cost location for all businesses, not just the film industry. With productions so mobile, there is a serious risk that companies seeking to keep their costs down will leave.

The stakes are substantial. Motion picture production sustains employment for 245,900 people with earnings of $17.2 billion in California. The industry has deep roots in the state, particularly in Los Angeles, and will not disappear any time soon. The real threat, rather, is that this major economic engine could gradually leave the state, one project at a time. Indeed, each time a film leaves the state it acts as a *de facto* training program for a few more local workers somewhere else, making it more attractive for the next production.

The table below looks at runaway production, by project type. For each, it summarizes the spending, economic output, total employment and state tax revenue at risk if the project were to change locations from California to somewhere outside of the state.

What's at Stake:
Dollars and Jobs at Risk When Motion Picture Productions Leave California

Production Type	Production Spending	Economic Output	Employment*		State Taxes
			Actual	FTE	
COMMERCIAL	$561,000	$1,600,000	96	7	$47,000
MOVIE-OF-THE-WEEK	$4,400,000	$12,630,000	341	102	$640,000
1-HOUR DRAMA (12 EPISODES)	$26,800,000	$76,490,000	404	719	$3,100,000
LOW-BUDGET FEATURE FILM	$1,700,000	$4,790,000	290	59	$215,000
MID-BUDGET FEATURE FILM (LOW)	$15,400,000	$43,940,000	1,001	304	$1,784,000
MID-BUDGET FEATURE FILM (HIGH)	$31,600,000	$89,950,000	1,770	565	$4,060,000
BIG-BUDGET FEATURE FILM	$69,700,000	$198,470,000	1,300	928	$10,590,000

*Actual employment is the number of people who worked (however briefly) on the production. FTE is the annual, full-time equivalent this work represents.
Source: LAEDC

The jobs and tax revenue are deemed "at-risk" because even if a production leaves the state, some of the spending, employment and taxes may remain. Filming may be done in another state, for example, but if the post-production work remains in Los Angeles, then not all of the economic activity generated by the production will be lost to California.

For many productions, however, when they leave, virtually all of the beneficial impact for California leaves with them. When a commercial, movie-of-the-week or a one-hour television drama leaves California, virtually the entire production activity leaves: pre-production, filming, and post-production work typically is done in the same place. A star may be brought in from Los Angeles, but most of the above-the-line and all of the below-the-line workers will be locals. For California, this means that any tax revenue generated by these productions effectively disappears.

With feature films, the extent of the loss to run-away production varies. On a big-budget picture shot elsewhere in North America, the post-production work will be complex and will almost certainly return to Los Angeles. Thus, some of the work, and a portion of the taxes from these "lost" productions will remain in California. For pictures shot overseas, the post-production work will likely remain there. For these films, the state tax revenues are truly lost, with the notable exception of any state income tax liability incurred by above-the-line California residents—producers, directors, writers, and actors—working overseas.

Several developments make it increasingly likely that when a production company selects a location outside of California, it will move the entire project. First, the development of post-production facilities and experienced personnel in other countries and states has reduced the imperative to return post-production work to Southern California. Second, tax credits and grants offered to film production companies are frequently tied to the amount of money spent in a state, province or country. This creates an incentive to move as much work as possible. Indeed, some tax credits and grants are explicitly aimed at attracting the post-production work. Third, industry economics are driving production companies to cut costs. Movies-of-the-week made for the domestic market in the United States used to be sold overseas as well. Today, however, the outlets in Germany (to pick one example) that used to purchase American movies-of-the-week are more likely to purchase movies made locally. With the loss of potential overseas revenues, production companies now have to be much more cost-conscious when making movies-of-the-week.

The taxes described in the table on the previous page are an *underestimate* of the state revenue generated by each production. The estimates only include state income tax and the state share of taxable purchases. State unemployment and disability taxes as well as state taxes on any corporate profits are not included. Nor have we included any state taxes generated by tertiary industries that benefit from the presence of film production.

Additional Costs: Tourism, a major economic engine in California and the number one industry by employment in Southern California, receives a tremendous boost from the active presence of the motion picture industry. Countless tourists visit Los Angeles every year, drawn by the allure of Hollywood. People get a "buzz" from seeing location production activity and visiting the filming location(s) of their favorite movies. Two examples illustrate the potential tourist appeal created by motion pictures. First, the Academy Award winning film *Sideways* has had an astonishing impact on tourism in Santa Barbara County. The Santa Barbara Conference & Visitors Bureau and Film Commission have even collaborated to produce a map so that the film's fans can visit the wineries and other locations seen in the film. Second, New Zealand has sought to capitalize on its recent hosting of the filming of the *Lord of the Rings* trilogy. The national carrier Air New Zealand even painted pictures of the film's characters on its aircraft along with an invitation to "Visit Middle Earth".

Motion picture production in California also gives significant exposure and a sales boost to other major design-based industries, notably apparel and furniture. Potential consumers see these made-in-California items in the movies or on television and at awards shows. Also, the numerous television "entertainment" shows – based out of Los Angeles because the industry's talent is here – provide additional free exposure for apparel and lifestyle items.

Finally, it is worth noting that the state is not the only financial beneficiary of motion picture production activity in California. The productions described above also generate substantial tax revenues for city and county governments, including sales tax, business license fees, utilities and parking taxes, permit fees, and transient occupancy (hotel) taxes.

U.S. Production Incentives*

STATE	INCENTIVE	DESCRIPTION
ARIZONA	INCOME TAX CREDITS	• **20% transferable** income tax credit on in-state production expenditures on projects spending $3 million or more (10% when spending under $3 million.) • **50%** sales and use tax rebate on purchase or lease of tangible property on productions spending $1 million or more. • To qualify, a production must hire a minimum number of AZ residents.
FLORIDA	FILM INDUSTRY REBATE PROGRAM	• **15%** reimbursement of qualified Florida expenditures for production spending at least $850,000. • Funded at $10 million per year.
GEORGIA	INCOME TAX CREDIT	• **9%** Transferable income tax credits on all costs spent in Georgia, plus: • **3%** credit on wages paid to GA residents, plus: • **2%** credit for TV productions that spend more than $20 million annually, plus: • **3%** credit for productions in distressed areas.
ILLINOIS	TRANSFERABLE WAGE TAX CREDIT	• **25%** transferable income tax credit on first $25,000 of wages paid to Illinois residents
LOUISIANA	INVESTOR TAX CREDIT EMPLOYMENT/LABOR TAX CREDIT SALES & USE TAX EXCLUSION	• **25%** transferable tax credit on Louisiana spending (if spending exceeds $ 8 million, otherwise 10% credit) plus: • **10%** credit on total aggregate payroll of Louisiana residents (excluding salaries in excess of $1 million) plus: • **4%** sales and use tax exclusion
MARYLAND	FILM PRODUCTION ACTIVITY	• Wage rebate up to $12,500 per eligible employee for projects spending over $500,000. Funded at $4 million per year.

* Current as of June 10, 2005. Source: California Film Commission.

U.S. Production Incentives* (Continued)		
STATE	**INCENTIVE**	**DESCRIPTION**
MONTANA	REFUNDABLE TAX CREDIT	• **12%** refundable tax credit on up to $50,000 in wages paid to Montana residents. • **8%** credit on total in-state spending.
NEW YORK	FILM PRODUCTION TAX CREDIT	• **10%** refundable tax credit of qualified expenditures, capped at $100 million over 4 years • City of New York offers the same incentive with a refundable tax credit equal to **5%** of qualified expenditures capped at $37.5 million for 3 years.
OKLAHOMA	REBATE PROGRAM	• **15%** of eligible in-state costs. Capped at $2 million per year. • Sales tax exemption on tangible property and services.
OREGON	PROD. INVESTMENT FUND SALES TAX EXEMPTION LABOR REBATE	• **10%** rebate on in Oregon costs, capped at $250,000 per film production • No sales tax on all purchases. • **6.2%** rebate on Oregon wages (pending)
PENNSYLVANIA	INCOME TAX CREDIT	• **20%** assignable tax credit of qualified Pennsylvania costs when spending 60% of production costs in state ($10 million annual cap)
PUERTO RICO	PRODUCTION PROJECT TAX CREDIT	• **40%** transferable labor tax credit (paid to Puerto Rican residents). At least 50% of the shooting must take place in Puerto Rico.

* Current as of June 10, 2005. Source: California Film Commission.

U.S. Production Incentives* (Continued)		
STATE	**INCENTIVE**	**DESCRIPTION**
RHODE ISLAND	TRANSFERABLE TAX CREDIT INVESTOR TAX CREDIT (non transferable)	• **25%** tax credit for all Rhode Island spending when spending is over $300,000. • Investor will receive **15%** tax credit for budgets between $300,000 and $5 million. For budgets over $5million, investor will receive **25%** tax credit.
SOUTH CAROLINA	TRANSFERABLE TAX REBATES	• **15%** rebate of total aggregate payroll for employees who are subject to South Carolina withholding, if in-state spending is at least $1 million. Plus: • **7%** sales tax exemption for purchases of in-state goods and services. Plus: • **15%** rebate program for in-state purchases/rentals. • Capped at $10 million annually.

* Current as of June 10, 2005. Source: California Film Commission.

Canadian Production Incentives*

PROVINCE	INCENTIVE	DESCRIPTION
CANADA (FEDERAL)	CANADIAN PRODUCTION TAX CREDIT (Federal incentive is **in addition** to provincial incentives below)	• **16%** federal tax credit on Canadian labor expenditures • No Limitation on the amount of any Canadian refund
BRITISH COLUMBIA	FILM INCENTIVE TAX CREDIT DIGITAL ANIMATION OR VISUAL EFFECTS TAX CREDITS	• **18%** tax credit on BC labor expenditures • **6%** additional tax credit on labor expenditures outside of Vancouver • **15%** Digital animation or visual effects credit for BC labor costs
ONTARIO	FILM INCENTIVE TAX CREDIT	• **18%** refundable tax credit on Ontario labor expenditures • **10%** additional tax credit for productions outside of the Toronto area • **20%** Ontario computer animation credit
MANITOBA	FILM INCENTIVE TAX CREDIT	• **45%** refundable tax credit on Manitoba labor expenditures • **5%** frequent film bonus, additional tax credit for 3 or more projects
NOVA SCOTIA	FILM INCENTIVE TAX CREDIT	• **35%** tax credit on Nova Scotia labor expenditures • **5%** frequent film bonus, additional tax credit for 3 or more projects
QUEBEC	FILM INCENTIVE TAX CREDIT	• **20%** refundable tax credit on Quebec labor expenditures
SASKATCHEWAN	FILM INCENTIVE TAX CREDIT	• **17.5%** refundable tax credit of the total production cost • **22.5%** refundable tax credit if outside of the province’s two major cities

* Current as of May 12, 2005. Source: California Film Commission.

Other International Production Incentives*		
STATE	**INCENTIVE**	**DESCRIPTION**
AUSTRALIA	REFUNDABLE TAX OFFSET	• **12.5%** rebate for qualifying Australian production expenditures on films and TV series that spend a minimum of A$15 million.
FIJI	TAX CREDITS	• **15%** refundable tax offset for productions that spend a minimum of F$50,000.
IRELAND	PRODUCTION TAX RELIEF	• **12%** of Irish production expenditures capped at $2.9 million per project.
NEW ZEALAND	FILM GRANTS	• **12.5%** large budget film grant on films that spend a minimum of NZ$15 million.
SOUTH AFRICA	SOUTH AFRICAN PRODUCTION EXPENDITURE	• **15%** of the gross amount spent in South Africa for foreign production. At least 50% of the production must be shot in South Africa with a minimum budget of $3,800,000.
UNITED KINGDOM	TAX DEDUCTION	• A production company can enter into a "sale and lease back" of its film with a UK investor and receive approximately **15%** of its negative cost.

* Sample of production credits available outside the U.S. and Canada as of May, 2005.
Source: California Film Commission